



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/574,574

04/04/2006

Kouichi Sakata

2101-27

9285

23117 7590 09/16/2008
NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203

EXAMINER

PEPITONE, MICHAEL F

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

09/16/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/574,574	Applicant(s) SAKATA ET AL.	
	Examiner MICHAEL PEPITONE	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5 and 7-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5 and 7-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-2, 5, and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uno *et al.* (US 2002/0188073) in view of Joachimi *et al.* (US 2003/0130381).

Regarding claims 1-2, 5, and 10-13: Uno *et al.* teaches a polyester molding composition comprising 30 to 95 parts by weight PBT [instant claim 2] (§25), 1-30 parts by weight of polyester elastomer (§32), and 1-30 parts by weight polycarbonate {total is 100 parts by weight} {based on total of resin} (§ 1-2, 11-15, 20).

Uno *et al.* does not teach aromatic polycarboxylic acid ester plasticizer in an amount of 1 to 10 parts by weight. However, Joachimi *et al.* teaches a moulding composition (§ 1, 26-31)

Art Unit: 1796

comprising polybutylene terephthalate [instant claim 2] (§ 42, 47-48, 50-51, 53, 102) and polycarbonate (§ 54; 102), in an amount of 35 to 99.999 wt% (§ 27); an elastomer (§ 32-34, 115, 125-128), in an amount of 0 to 30 wt% (§ 30); and a plasticizer (§ 117, 124) in an amount of 0 to 30 wt% (§ 30), specifically dioctyl phthalate {phthalic acid dioctyl ester} (§ 124), which has an index of refraction of 1.49 [instant claim 5]. Uno *et al.* and Joachimi *et al.* are analogous art because they are concerned with a similar technical difficulty, namely the preparation of PBT/PC/elastomer moldings. At the time of invention a person of ordinary skill in the art would have found it obvious to have combined 0 to 30 wt% dioctyl phthalate, as taught by Joachimi *et al.* in the invention of Uno *et al.*, and would have been motivated to do so since Joachimi *et al.* suggests that dioctyl phthalate is a suitable plasticizer for PBT/PC/elastomer molding material (§ 117, 124).

The Office realizes that all the claimed effects or physical properties are not positively stated by the reference. However, the reference teaches all of the claimed reagents. Therefore, the claimed effects and physical properties, i.e. a laser weldable resin composition, would implicitly be achieved by a composition with all the claimed ingredients. If it is the applicants' position that this would not be the case: (1) evidence would need to be presented to support applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties and effects with only the claimed ingredients.

Regarding claims 7-8: Uno *et al.* teaches a glass fibers and glass flakes {glassy filler} [instant claim 7-8] (§ 35, 38).

Regarding claim 9: Uno *et al.* teaches a nucleating agent (§ 42, 46).

Art Unit: 1796

Regarding claims 10-11: Uno *et al.* teaches molded parts [instant claim 11] (§ 11, 90, 96).

The Office realizes that all the claimed effects or physical properties are not positively stated by the reference. However, the reference teaches all of the claimed reagents. Therefore, the claimed effects and physical properties, i.e. a fluctuation range of light transmittance is not more than 10% [instant claim 10], would implicitly be achieved by a composition with all the claimed ingredients. If it is the applicants' position that this would not be the case: (1) evidence would need to be presented to support applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties and effects with only the claimed ingredients.

Regarding claims 12-13: Uno *et al.* does not teach laser welding of a molded product and counterpart [instant claim 12], wherein the first molded product is in contact with the laser beam {laser transparent} and the counterpart is located on the receiving side [instant claim 13]. However, Joachimi *et al.* teaches laser welding of a molded product and counterpart [instant claim 12] (§ 1, 24-30, 42, 139-149, 155-161), wherein the first molded product is in contact with the laser beam {laser transparent} and the counterpart is located on the receiving side [instant claim 13] (§ 160-161, tables 5 and 6). Uno *et al.* and Joachimi *et al.* are analogous art because they are concerned with a similar technical difficulty, namely the preparation of PBT/PC/elastomer moldings. At the time of invention a person of ordinary skill in the art would have found it obvious to have laser welded a molded product and counterpart [instant claim 12], wherein the first molded product is in contact with the laser beam {laser transparent} and the counterpart is located on the receiving side, as taught by Joachimi *et al.* in the invention of Uno

Art Unit: 1796

et al., and would have been motivated to do so since Joachimi *et al.* suggests that laser welding of {PBT/PC/elastomer} molding compositions allows the production of molded parts having a high surface quality that can be reliably joined to laser transparent molded parts by a laser welding process (§ 24), and is an equivalent alternative means of providing a {PBT/PC/elastomer} molding material.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uno *et al.* (US 2002/0188073) in view of Joachimi *et al.* (US 2003/0130381), as applied to claim 1 above, in further view of Houston *et al.* (US 2002/0190408).

Regarding claim 3: Uno *et al.* and Joachimi *et al.* renders the basic claimed composition obvious [as set forth above with respect to claim 1].

Uno *et al.* does not teach an elastomer with a refractive index of 1.52 to 1.59. However, Houston *et al.* teaches the refractive index of an elastomer should be chosen to produce an iso-refractive system between the two phases present in order to minimize light scattering (§ 54). Uno *et al.* and Houston *et al.* are analogous art because they are concerned with a similar technical difficulty, namely the preparation of plasticized thermoplastic-elastomer moldings (§ 1, 52). At the time of invention a person of ordinary skill in the art would have found it obvious to have combined elastomers having an refractive index to create an iso-refractive system, as taught by Houston *et al.* in the invention of Uno *et al.*, and would have been motivated to do so since Houston *et al.* suggests that matching the refractive indexes of the phases {elastomeric and thermoplastic} provides materials with reduced light scattering (§ 54), and is an equivalent

Art Unit: 1796

alternative means of providing a plasticized thermoplastic-elastomer molding material for laser welding.

The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. See attached form PTO-892.

Response to Arguments

Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

Uno *et al.* (US 2002/0188073) discloses a moulding composition having the components of instant claim 1 [see above] in the specified amounts. Uno *et al.* (US '073) is silent to use of plasticizers (the silicone oil was used for increasing alkali resistance). Dioctyl phthalate is a well know plasticizer, and Joachimi *et al.* (US '381) discloses plasticizers (§ 117, 124) in an amount of 0 to 30 wt% (§ 30), specifically dioctyl phthalate in a similar moulding composition. Although Uno *et al.* (US '073) is silent to laser welding, the combined teachings of Uno *et al.* (US '073) and Joachimi *et al.* (US '381) would afford a PBT/PC/elastomer molding composition which would be capable of undergoing a laser welding procedure.

A showing of unexpected results {the composition uniformly welded to a counterpart material} must be based on evidence, not argument or speculation. *In re Mayne*, 104 F.3d 1339, 1343-44, 41 USPQ2d 1451, 1455-56 (Fed. Cir. 1997) [See MPEP 2145].

Houston *et al.* (US 2002/0190408) is relied upon for production of an iso-refractive system such that light scattering between phases {thermoplastic and elastomer phases} is

Art Unit: 1796

reduced. The scattering of light (laser light) would be problematic for a moulding composition which will undergo a laser welding process.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL PEPITONE whose telephone number is (571)270-3299. The examiner can normally be reached on M-F, 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1796

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MFP

5-September-08

/Marc S. Zimmer/

Primary Examiner, Art Unit 1796